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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/005,309 | 12/03/2001 | Takahiro Kawashima | PW 0277024 H7605US | 7933 |

7590 11/13/2008
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| EXAMINER |
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SAMS, MATTHEW C

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| ART UNIT | PAPER NUMBER |
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2617

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| MAIL DATE | DELIVERY MODE |
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11/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/005,309 | Applicant(s) KAWASHIMA, TAKAHIRO | |
| | Examiner MATTHEW SAMS | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 8/11/2008 & 9/22/2008 have been entered.
2. Claims 1, 5, 6, 7, 9 and 10 have been amended and claims 13-15 have been added.
3. The 35 U.S.C. 112 second paragraph rejection has been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-10 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto (US-5,559,298) in view of Lee (US-6,292,440).

Regarding claim 1, Okamoto teaches a tone generator system (Fig. 1 [17]) comprising:

which generates at least one musical tone in response to sounding instruction data relating to a channel by using a program number (Col. 4 lines 12-16 “tone generation parameter”) based on tone color changing instruction data designating a tone color of the corresponding channel which is stored in predetermined timing before a sounding instruction data, the tone color changing instruction data including a channel number and a corresponding program number, and the sounding instruction data including the channel number, (Col. 4 lines 28-31 and Fig. 6) supplies the tone color changing instruction data obtained by interpreting the series of messages, and then supplies the sounding instruction data obtained by interpreting the series of messages

a first waveform storage that stores compressed waveform data (Fig. 1 [12]), the compressed waveform data being compressed in a compression method for compressing waveform data in units of a frame comprised of a plurality of samples encoded with a format; (Col. 6 lines 40-42 and Col. 8 lines 58-60)

a second waveform storage; (Fig. 1 [13])

a sequencer that sequentially receiving and interprets a series of messages included in a musical composition file; (Col. 5 lines 7-13 and Fig. 1 [20])

a decoder that, when said sequencer interprets a program change message into tone color changing instruction data including a channel number indicative of a channel and a program number indicative of a tone color (Col. 4 lines 12-16 “tone generation parameter”), reads out from said first waveform storage the compressed waveform data based on the program number included in the supplied tone color changing instruction data, decodes the readout compressed waveform data into waveform data in a pulse

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code modulation format (Col. 4 lines 41-45), and stores the decoded waveform data in the pulse code modulation format into said second waveform storage; (Col. 5 lines 7-13 and Fig. 1 [21]) and

a tone generator section (Fig. 1 [17]) that, when said sequencer interprets a note-on message following the program change message into sounding instruction data including the channel number, reads out from said second waveform storage the waveform data in the pulse code modulation format, and generates musical tones based on the readout waveform data in the pulse code modulation format, (Col. 3 line 51 through Col. 5 line 16) wherein

said decoder starts to at least read out the compressed waveform data before said tone generator section starts to generate the musical tones so as to prevent a delay in generating musical tones. (Col. 4 lines 28-31, Col. 4 lines 54-60 and Fig. 6)

Okamoto differs from the claimed invention by not explicitly reciting a plurality of samples are encoded with a format consisting of at least one of MP3, MPEG-1, AAC and ATRAC.

In an analogous art, Lee teaches a car audio player (Fig. 1) that uses MP3 file formats for compressing audio signals. (Col. 1 lines 6-13) At the time the invention was made, it would have been obvious to one of ordinary skill in the art would to have been motivated to implement the tone generator system of Okamoto after modifying it to incorporate the use of the MP3 file format of Lee since the MP3 file format allows for compressing and decompressing highly compressed audio files without a loss of sound quality. (Col. 1 lines 6-13)

Regarding claim 3, Okamoto in view of Lee teaches a tone generator system according to claim 1, wherein said second waveform storage is operable for storing waveform data inputted by a user. (Okamoto Col. 4 lines 17-22 and Fig. 1 [13, 14, 15, 16 & 21])

Regarding claim 4, Okamoto in view of Lee teaches the decoder is operable for decoding compressed audio stream data inputted from an external device. (Okamoto Col. 4 lines 17-22, 41-45 and Fig. 1 [16])

Regarding claims 5, the limitations of claim 5 are rejected as being the same reason set forth above in claim 1.

Regarding claim 6, the limitations of claim 6 are rejected as being the same reason set forth above in claim 1.

Regarding claim 7, the limitations of claim 7 are rejected as being the same reason set forth above in claim 3.

Regarding claim 8, the limitations of claim 8 are rejected as being the same reason set forth above in claim 4.

Regarding claim 9, the limitations of claim 9 are rejected as being the same reason set forth above in claim 3.

Regarding claim 10, the limitations of claim 10 are rejected as being the same reason set forth above in claim 4.

Regarding claim 13, the limitations of claim 13 are rejected as being the same reason set forth above in claim 1.

Regarding claim 14, Okamoto in view of Lee teaches the tone generator section generates musical tones based on waveform data inputted by a user and stored in said second waveform storage (Okamoto Col. 4 lines 7-16), in addition to, or in place of, the waveform data decoded by the decoder, depending on a mode set by the user with respect to one or more program numbers. (Okamoto Col. 4 lines 17-67)

Regarding claim 15, the limitations of claim 15 are rejected as being the same reason set forth above in claim 4.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 3-10 and 13-15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-6,195,736 to Lisle regarding a method for paging wavetable synthesis samples in memory.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW SAMS whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 8-6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/

Supervisory Patent Examiner, Art Unit 2617

MCS

11/8/2008